

touch-sensitive sheet member is applied. In this embodiment, an input device 400 is provided in which the element bag portion is arranged by dividing it into three layers each forming the icon images of one of respective three groups in different planes on the display unit 29, which is different from the third embodiment, and it is possible to execute the operation panel building mode which can select the element bag portions of the group corresponding to the icon images from the above-mentioned three groups.

[0219] The input device 400 shown in FIG. 24 is a device for inputting information by the slide and/or the pushdown operation depending on the finger or the like of the operator 30 (operation body). The input device 400 contains a display unit 29, an input detection unit 45 and a transparent layered sheet unit 140 by which a sense of touch is changed. These units are layered in this order. Particularly, the input detection unit 45 and the layered sheet unit 140 are provided on the display unit 29.

[0220] The layered sheet unit 140 constitutes the touch-sensitive sheet member. In the layered sheet unit 140, a touch-sensitive variable sheet unit 141 of a first layer, a touch-sensitive variable sheet unit 142 of a second layer and a touch-sensitive variable sheet unit 143 of a third layer are layered in this order from the downward. The bag structure of the embodiment of the touch-sensitive sheet member 200 is applied to the layered sheet unit 140.

[0221] The display unit 29 displays a plurality of push button switch images for the first to third layers respectively at a time of the input operation. The contents of the push button switch images constitute the icon images for the input operation. A key array K100 for a key board or the like is displayed on the display unit 29 as the push button switch image for the first layer. In this embodiment, the icon images are displayed corresponding to the arrangement of the key array including the characters of the numerals, the alphabet and the like in which the operation keys are lined up in five lines toward the backward from the just front.

[0222] The push button switch image for the second layer includes twenty keys K41 to K60 or the like for various kinds of function selections. The icon images of, for example, the Internet, a calendar, a camera, a calculator, a music, a telephone, a multimedia, user data, an album, various kinds of settings, a timer, a television, a Web, a wake-up call and the like are displayed on the display unit 29.

[0223] The push button switch image for the third layer includes the icon images of the key K1 of numeral "1" to the key K10 of numeral "0", the key K11 of symbol "\*", the K12 of symbol "#" or the like, the key K13 of determination "O" constituting the cross key, the left facing arrow key K14 thereof, the upward facing arrow key K15 thereof, the right facing arrow key K16 thereof, the downward facing arrow key K17 thereof or the like, which is similarly as the third embodiment and are displayed on the display unit 29. As the display unit 29, a liquid crystal display device (LCD device) is used.

[0224] Similarly as the third embodiment, the input detection unit 45 is provided on the upper portion of the display unit 29 and operates so as to detect the slide position and pressing force of the operator's finger or the like. For the input detection unit 45, as explained in the third embodiment, an input device having a constitution which can give the position detection information and the press detection information to a control system is used. For example, a capacitive touch panel, a resistive touch panel, an input device of surface

acoustic wave system (SAW) or optical system, or multi-stage system tact switch or the like is used.

[0225] The transparent touch-sensitive variable sheet unit 141 for the first layer is provided on the upper portion of the input detection unit 45. The touch-sensitive variable sheet unit 141 is provided so as to cover the whole of the input detection unit 45 and is pushed-down and operated along the operation surface of the display unit 29. In this embodiment, the touch-sensitive variable sheet unit 141 has a substrate 2c and at the upper portion thereof, a base member 104 having predetermined hardness and a plurality of rectangular dish shaped concave portions (hereinafter, referred to as element bag portion array E100) and a plurality of flow channels 2d to 2h. In this embodiment, the element bag portion array E100 is arranged corresponding to the arrangement of the key array (including the characters of the numerals, the alphabet and the like) in which the operation keys are lined up in five lines toward the backward from the just front.

[0226] In the base member 104, for example, a flow channel 2d is arranged corresponding to the operation keys of the first line. A flow channel 2e is arranged corresponding to the operation keys of the second line. A flow channel 2f is arranged corresponding to the operation keys of the third line. A flow channel 2g is arranged corresponding to the operation keys of the fourth line. A flow channel 2h is arranged corresponding to the operation keys of the fifth line. It is needless to say that the touch-sensitive variable sheet unit 141 may cover a portion of the input detection unit 45. In this embodiment, the upper portion of the base member 104 is sealed in (covered) by the substrate 2c, which becomes a lid, of the touch-sensitive variable sheet unit 142 of the second layer on the rear surface side thereof in order to improve the air-tightness. In this manner, the element bag portion array E100 is constituted of the base member 104 and the substrate 2c of the touch-sensitive variable sheet unit 142.

[0227] On the upper portion of the above-mentioned touch-sensitive variable sheet unit 141, the touch-sensitive variable sheet unit 142 is arranged. The touch-sensitive variable sheet unit 142 includes a substrate 2c and on the upper portion thereof, a base member 105 having predetermined hardness and twenty rectangular dish shaped element bag portions E41 to E60 and a flow channel 2i. In this embodiment, the element bag portions E41 to E60 are arranged at positions corresponding to the icon images of the Internet, the calendar, the camera, the calculator, the music, the telephone, the multimedia, the user data, the album, various kinds of the settings, the timer, the television, the Web, the wake-up call and the like. The upper portion of this base member 105 is also sealed in by the substrate 2c, which becomes a lid, of the touch-sensitive variable sheet unit 143 of the second layer on the rear surface side thereof in order to improve the air-tightness. In this manner, the element bag portions E41 to E60 are constituted of the base member 105 and the substrate 2c of the touch-sensitive variable sheet unit 143.

[0228] On the upper portion of the above-mentioned touch-sensitive variable sheet unit 142, the touch-sensitive variable sheet unit 143 is arranged. The touch-sensitive variable sheet unit 143 includes a substrate 2c thereof and the upper portion thereof, a base member 106 having predetermined hardness and seventeen elliptical dish shaped element bag portions E1 to E17 and a flow channel 2a. In this embodiment, the element bag portions E1 to E12 are arranged at positions corresponding to the icon images of the keys of numeral "0" to numeral "9", the keys of symbol "\*", symbol "#" and the like, and the